



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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1792

EA# OR-120-02-17

July 24, 2002

Dear Concerned Citizen,

The Coos Bay District of the Bureau of Land Management (BLM) has prepared an Environmental Assessment (EA# OR-120-02-17) assessing the potential impacts to the District resulting from: 1) Obliterating 1000' of a road failure site on John's Creek Road, in the Umpqua Resource Area. 2) Providing access beyond the road failure site, by constructing a reroute through a seven-year-old plantation, in the Myrtlewood Resource Area. 3) And modifying two road curves on Endicott Creek Road (Road # 29-12-24.0), leading to the reroute, and realigning two road junctions (at road #'s 29-11-7.3 and 7.5) past the road failure site.

The EA concludes in a Finding of No Significant Impact (FONSI). A copy of the EA and FONSI are attached for your review. Public comments on the appropriateness of the FONSI are being requested until August 12, 2002, at which time the Decision Record will be finalized. Questions should be directed to Darren McLeod at (541)-751-4236. Written comments may be sent to BLM at 1300 Airport Lane, North Bend, Or, 97459-2000, Attn: Darren McLeod, or e-mailed to us at coos_bay@or.blm.gov Attn: Darren McLeod.

Comments, including names and street addresses of respondents, will be available for public review at the above address during regular business hours (8:00 A.M. to 4:30 P.M.), Monday through Friday, except holidays, and may be published as part of the EA document or other related documents. Individual respondents may request confidentiality. If you wish to withhold your name or street address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in the entirety.

Sincerely,

/s/ Terry A. Richards for

Sue Richardson
Coos Bay District Manager



United States Department of the Interior

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Finding of No Significant Impact (FONSI)

for

John's Creek Emergency Repair Of Federally Owned Roads Environmental Assessment

EA#OR-120-02-17

I. Introduction

The United States Department of Interior, Bureau of Land Management, Coos Bay District (BLM), has prepared an Environmental Assessment (EA) that analyzed potential impacts to the Umpqua and Myrtlewood Resource areas from:

- Obliterating 1000' of the failure site on John's Creek Road, in the Umpqua Resource Area.
- Providing access beyond the road failure site, by constructing a reroute through a seven-year-old plantation, in the Myrtlewood Resource Area.
- Modifying two road curves on Endicott Creek Road (Road # 29-12-24.0), leading to the reroute , and realigning two road junctions (at road #'s 29-11-7.3 and 7.5) past the road failure site.

The purpose of the proposed actions are to:

- Provide for public safety by preventing vehicle access through the failure, and redirecting water runoff to improve drainage in the slide area.
- Provide access beyond the road failure to meet immediate silvicultural resource management needs. This would provide access to over 350 acres of government, and private lands, and provides for right-of-way agreement access by private landowners.
- Realign the road curves and junctions for safe vehicle movement, because obliteration of the failure site and the new reroute changes traffic patterns.

The EA evaluates the environmental elements impacted by the actions and the benefits expected from implementing the proposed actions. The EA also describes project design features that will be incorporated in order to minimize the potential for adverse environmental harm to occur during the project.

II. Background

The road failure site, at milepost 1.9 on the John's Creek Mainline Road number 29-12-1.1, located in T29S, R11W, Section 7, S½, failed during the 1999 winter storms. Since that time, onsite investigation has determined that repair of the roadbed in its present location is unfeasible due to the unstable ground.

The Coos Bay District (CBD) of the Bureau of Land Management (BLM) is under the direction of the Coos Bay District Resource Management Plan (RMP) and Environmental Impact Statement (EIS) and its Record of Decision (ROD)(BLM, 1995). The RMP and its' ROD are in conformance with the Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the range of the Northern Spotted Owl and its ROD (Northwest Forest Plan [NWFP]) (Interagency, 1994). Through these documents, the BLM, in conjunction with other Federal land agencies, is directed to conduct watershed analysis (WA), and to implement restoration projects to aid in the recovery of water quality and aquatic, riparian, and terrestrial habitats.

As stated in the ROD for the NWFP, the Aquatic Conservation Strategy (ACS) was developed to maintain the ecological health of watersheds and aquatic ecosystems on public lands within the range of Pacific Ocean anadromy. The Environmental Consequences section of the EA describes the consistency of the proposed alternative with the ACS objectives.

All Federal agencies are charged with managing programs to enhance the recovery of Federally listed endangered and threatened species and their habitats (Section 7(a)(1) of the Endangered Species Act). Implementing the proposed actions are expected to benefit numerous Endangered, Threatened, and Candidate species.

III. Finding of No Significant Impact

A careful review of the EA, which I herein adopt, indicates that there will not be a significant impact on the quality of the human environment from the implementation of any of the Action Alternatives. I agree with this conclusion and determined that an Environmental Impact Statement (EIS) will not be prepared. This determination is based on consideration of the following factors:

1. The proposed activities will occur in localized areas within John's Creek and Endicott Creek on the Coos Bay District. The proposed activities are not national or regional in scope.
2. The proposed activities will not significantly affect public health and safety. Best Management Practices are incorporated in the EA, including Spill Prevention, Control, and Countermeasures (SPCC), and where applicable, the presence of spill containment kits and operators trained in their use on work sites, to minimize risk.
3. The proposed activities will not have an impact on unique characteristics of the geographic area such as; Air Quality, Wilderness Values, Native American Religious Concerns, Environmental Justice, Historical or Cultural Resources, Ecological Critical Areas, or Energy Development.
4. The project areas are located at previously disturbed sites.
5. The effects on the quality of the human environment of the proposed activities are not highly controversial. The possible effects of the proposed activities on the quality of the human environment are not highly uncertain and do not involve unique or unknown risk.
6. The proposed projects do not establish a precedent for actions with future significant effects or represent a decision in principle about a future consideration.

7. The proposed activities will not affect districts, sites, highways, structures, or objects listed in, or eligible for listing in, the National Register of Historic Places.
8. The proposed projects will fully comply with the Endangered Species Act (ESA) of 1973, as amended.

Analysis, by the Fisheries Biologist, has been concluded that the proposed actions constitute a "Not Likely to Adversely Affect" to listed fisheries species and Essential Fish Habitat (EFH). The project is covered under the U.S. Fish and Wildlife Biological Opinion, August 8, 2001, #OSB2001-0070-PC-AM.

The project has been designed to minimize disturbance effects on marbled murrelet by incorporating the appropriate Project Design Criteria from the 1998 Coos Bay District Biological Opinion (US Fish and Wildlife Service 1998, # 1-7-98-F-079).

The Biological Opinions of the U.S. Fish and Wildlife Service (USFWS) will be available for review at the Coos Bay District Office of the Bureau of Land Management

10. There are no irreversible or irretrievable resource commitments identified by this assessment, except for a minor consumption of fossil fuels for routine operations.
11. The proposed activities will not violate Federal, State, or local laws imposed for the protection of the environment.

Recommended By:

/s/ Reg Pullen for
Rich Conrad
Myrtlewood Field Manager
Coos Bay District, BLM

Date: 7-24-02

/s/ Steven D. Fowler for
Elaine Raper
Umpqua Field Manager
Coos Bay District, BLM

Date: 7-24-02

Approved by:

/s/ Terry A. Richards for
Sue Richardson
District Manager
Coos Bay District
Bureau of Land Management

Date: 7-24-02

Environmental Assessment

EA : OR120 – 02 – 17

**A PROPOSAL TO CONSTRUCT, IN THE MIDDLE FORK COQUILLE 5TH FIELD
WATERSHED, A REROUTE OF A SECTION OF JOHN'S CREEK ROAD**

Through Emergency Repair Of Federally Owned (ERFO) Funding

PROPOSED THIS 24th DAY OF JULY, 2002

This action is subject to and in conformance with the *Coos Bay District Resource Management Plan*, with its' *Record of Decision* (BLM 1995), and the *Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl* with its *Record of Decision* and *Standards and Guidelines* (Interagency, 1994)

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Section I – Purpose of and Need for the Action

Need And Purpose For Action:

The Bureau of Land Management Coos Bay District is analyzing a road failure site at milepost 1.9 on the John's Creek Mainline Road number 29-12-1.1, located in T29S, R11W, Section 7, S½. The road failed at this milepost during the 1999 winter storms. Onsite investigation determined that repair of the roadbed in its present location was unfeasible due to unstable ground. Because of ongoing resource management objectives, access to areas beyond the road failure site is required. The areas analyzed in this EA are located within the General Forest Management Area Land Use Allocation as designated by the Coos Bay District Resource Management Plan and its Record of Decision (USDI BLM 1995).

Related Planning Documents:

The John's Creek road failure area is included in the North Fork Coquille Watershed Analysis (BLM 2002 Coos Bay), and the Middle Fork Coquille Watershed Analysis (BLM 1994 Coos Bay) includes the proposed reroute. These watershed analyses contain data, information, and recommendations, which represent the current understanding of conditions and natural processes in the analysis area. They are not intended as decision documents and are used in the context of providing information for developing project alternatives and project design criteria. Both of these Watershed Analyses are hereby incorporated by reference.

This EA is tiered to the *Coos Bay District Resource Management Plan*, with its' *Record of Decision* (BLM 1995), which is in conformance with the *Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl* with its *Record of Decision* and *Standards and Guidelines* (Interagency, 1994). It is also tiered to the *Draft Supplemental Environmental Impact Statement For Amendment to the Survey and Manage, Protection Buffer, and Other Mitigating Measures Standards and Guidelines* (Interagency 1999). This EA is also in conformance with the *Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigating Measures Standards and Guidelines* (Interagency 2001).

The EA is also consistent with the *Western Oregon Districts Transportation Management Plan* (USDI BLM 2002). Actions described in this EA are designed to be in conformance with the Aquatic Conservation Strategy (ACS) Objectives listed in the *Northwest Forest Plan* (USDA, USDI 1994) on page B-11 and pages C- 31 to C-37 under the Standards and Guidelines for Riparian Reserves.

Scoping And Issues:

Public input was solicited by posting a notice on our District Internet Page, by publishing a legal notice in *The World* newspaper, and by sending a letter to individuals and organizations on our District mailing list.

An interdisciplinary team was formed to examine and analyze the issues and alternatives. The team's specialist reports may be found in the analysis file, hereby incorporated by reference. The primary issue would be: access for ongoing resource management objectives beyond the John's Creek road failure site.

The following issues were eliminated from detailed study, as directed by 40CFR regulation 1500.1(b), 1500.2(b) and other sections. These issues directly influenced the technical design and criteria for the proposed project. Specialist reports, in the analysis file, may contain additional information.

- ? Sediment and/or Aquatic Conservation Objectives: The proposed reroute would be located near the ridge top, crosses no streams, and would be several hundred feet from the headwall of any streams. These factors coupled with the technical design and Best Management Practices mitigates sediment

problems, or meeting Aquatic Conservation Objectives. Additionally, the failure site is a geological problem and would continue, regardless of our decision or actions, and would be considered a normal landscape process.

Decisions To Be Made:

- ? The Field Managers, of the Coos Bay Bureau of Land Management Umpqua and Myrtlewood Field Offices, must decide whether to continue using the road failure site at current maintenance levels, or provide an alternative access for resource management objectives and safety. These alternatives are described in Section II.
- ? The Field Managers must also determine if the selected alternative would or would not be a major Federal action, significantly affecting the quality of the human environment.
 - o If the Manager determines it would not significantly affect the quality of the human environment, then the manager can prepare and sign a Finding of No Significant Impact (FONSI).
 - o If the Managers determine that the selected alternative would significantly affect the quality of the human environment, then the project must either be dropped, modified or have an Environmental Impact Statement (EIS) and a Record of Decision (ROD) prepared and signed before the project could proceed.

Permits, Licenses, Or Entitlements:

No Federal permits, licenses, or entitlements are required for this project. A crossing request agreement would be obtained from Moore Mill, with whom we have a reciprocal right-of-way agreement.

Section II – Alternatives, Including the Proposed Action

This Section describes each alternative, and summarizes the environmental consequences from Section IV.

Alternatives Eliminated From Further Consideration/Reasonable Range of Alternatives

- ? Road Closure With No Reroute: The roads, past the failure site, access over 350 acres of government land and private lands. Road access is needed to meet our resource management needs, and provide for right-of-way agreement access to private landowners. The government lands are general forest management lands, and silviculture treatments are scheduled for areas beyond the failure in the next two years. Follow-up treatments are scheduled to occur five years later. Fire protection access is required, for up to three years, after each silviculture treatment. By the end of these treatments, the area would be eligible for commercial thinning. There are no reasonable lengths of time between treatment needs, fire access requirements, and potential commercial thinning for road closure.
- ? Road Closure With Reroutes Other Than The Proposed Action Alternative: Other potential reroute locations were considered. These potential reroutes were eliminated based on the following: unstable ground, steeper road grade, longer distance of road construction, number of stream crossings or amount of riparian zones traversed, and total cost.

Alternative No. 1 - No Action:

The road failure site (at milepost 1.9 on the John's Creek Mainline Road number 29-12-1.1 located in T29S, R11W, Section 7, S½) would not be closed and receive maintenance only when needed for resource management objectives. Maintenance would include rocking and/or leveling the road, and ditch line cleaning. Lack of maintenance and continued use would compromise public safety and disrupt water drainage patterns, and could increase failure rates. The slide severity could be increased because repeat placement of fill materials, used to repair the road, could overload the slide. The failure is located at mid-slope on unstable ground, future failures are likely to occur, and additional failures could be more expensive to repair. Increased failure rates could allow for more sediment delivery over a shorter time frame. Existing geological slide conditions would continue regardless of the status of the road.

Alternative No. 2 - Proposed Action:

The Proposed Action addresses whether future management actions by BLM, timber companies, or adjacent landowners would require access beyond the road failure, which would necessitate repairing the damage.

The site was carefully considered for closure. The Coos Bay District's Watershed analysis, Transportation Management Objectives, and the Silviculture Department indicated that access would be required beyond the road failure. In addition, the road has Right-of-Way Agreements that provide, companies or individuals, access to their lands. The road system could not, legally, be permanently closed without their consent. On-site discussions covered these subjects, included the cause of the failure, issues of concern (ex. safety for woods workers and recreationalist), land use allocation, and current or future management needs of the resources.

The Proposed Action covers:

- ? Obliteration of the failure site to prevent vehicle access and provide proper drainage by redirecting runoff. About 1000' of road would be obliterated.
- ? Providing access beyond the road failure, by constructing a reroute through a seven-year-old plantation. The reroute would be located near a ridge-top on more geologically stable ground and would not cross any streams or travel through riparian zones.

- ? Realignment of two road junctions (at road #'s 29-11-7.3 and 7.5) past the road failure site and modification of two road curves on Endicott Creek Road (Road # 29-12-24.0), would be needed. These corrections are required to provide for safe vehicle movement because of the change in traffic directions, resulting from the obliteration of the failure site and the new reroute. Suitable waste material would be used in the reconstruction of the road junctions. Unsuitable waste would be placed outside of the new embankment construction limits, within the old roadbeds, at the modified road junctions.

Project Design Features For All Actions:

Many of the design features are Best Management Practices, included for emphasis.

- ? If cultural materials are encountered, during project activities, all work at the discovery site would stop immediately and the District Archeologist would be notified at once.
- ? All disturbed and exposed soil would be stabilized with BLM approved grass seed mixes; native grasses are to be used if available, and fertilized and mulched. Grass and straw mulch mixes shall be certified as weed free, and obtained from local sources, if possible. Soil stabilization would be finished upon completion of construction activities at each site, rather than waiting until all sites are completed. Sites with little or no revegetation after one growing season would be reseeded, fertilized and mulched, according to these specifications.
- ? No blasting between 1 March and 15 September, and work with noise levels above ambient would be restricted to the hours of two hours after sunrise until two hours before sunset between 1 April and 15 September.
- ? Contractors would be required to follow the Bureau of Land Managements Hazardous Materials Contingency Plan and procedures, and the directions found in the District Oil Spill Plan. This includes, but is not limited to, having a Spill Prevention Control and Countermeasures Plan (SPCC) in place, and a Petroleum Spill Kit on site during operations.
- ? If any hazardous materials or solid waste are encountered, during project activities, all work at/near the discovery site would stop immediately and the District Hazardous Material Specialist would be notified at once. Operations may resume at the discovery site upon receipt of written instructions. No objects of hazardous materials or solid waste shall be removed from the project area.
- ? Equipment used during this project shall be inspected and cleaned prior to move-in, to limit the introduction or spread of: petroleum or other chemical contaminants; noxious weeds; and POC root rot disease. Any visible leakage of petroleum product shall be corrected. Equipment shall be washed offsite at a commercial facility. Wash receipts are to be filed in the main contract file.
- ? Prior to the start of project activities all Port-Orford-Cedar within 30' of the road edges for the proposed road junction realignments and along the 29-12-7.7 road would be cut.
- ? Road construction activities would be limited to the dry season, generally from June to October.

Project Design Features For The Road Failure Obliteration:

- ? Obliterating of the road failure site would occur after the reroute is completed. The length of road to be obliterated is about 1000'. Obliteration includes removal of culverts and reestablishment of natural drainage along the scarp of the slump to prevent aggravation the natural slide process. Erosion controls would be used, as necessary, to ensure that sediment delivery to streams or other water bodies is negligible during the obliterating process.

Project Design Features For The Reroute, and Road Junction Realignments:

- ? Road construction would be full bench for mid-slope roads, and follow the Conservation Practices for Road and Landing Construction outlined in the Coos Bay District Record of Decision and Resource Management Plan (Appendix D, Pages D-3 and D-4 [USDI-BLM 1995]). Construction

activities would be conducted during the dry season. Road width would be 12 feet with curve widening and turn outs provided as required. Road grades range from 0-18% and the surface would be aggregate rock. The reroute length is about 1800' (200' on Moore Mille Land and 1600 on BLM Land).

- ? Suitable waste material would be incorporated into the engineered road, or realignment segments. Unsuitable waste would be placed outside of the new embankment construction limits of the road realignments, within the old roadbeds. The two road junction realignments would involve about 300' (i.e. 100' and 200') of new construction.
- ? Large competent boulders would be set aside, at a stable landing on site, for future use.
- ? Offsite movement of sediment from the road or ditch line near streams would be contained with silt fences, sediment entrapping blankets, or straw bales. Control structures would be given frequent maintenance and be removed upon completion of work. Sediment retained by filtering structures would be transported to an upland location to prevent subsequent delivery to streams.
- ? Ditch relief culverts would be spaced at appropriate intervals according to road width and slope, to provide surface drainage across the roadway. Cross drains would be installed on planar or divergent topography when side slopes exceed 60% gradient. Cross drains in or directly above, convergent topography where slopes exceed 60%, would be avoided.

Monitoring:

- ? Monitoring would be accomplished by contract compliance inspections by contracting officers or their representatives as the work is performed to ensure that contract stipulations are met.
- ? Resource specialists may visit the site during or after project activities.
- ? Pre- and post-implementation monitoring would be carried out in accordance with the Northwest Forest Plan and the Coos Bay District Resource Management Plan. Monitoring could be conducted under the District implementation monitoring as directed by the *Coos Bay District Resource Management Plan*, with its' *Record of Decision* (BLM 1995).

Section III – Affected Environment

This section describes environmental components that could be affected, by the alternatives (including No-Action), and does not address environmental consequences. It serves as the baseline for the effects and consequence comparisons to follow in Section IV-Environmental Consequences.

Critical Elements of the Human Environment:

Examination shows the following critical elements of the human environment to be *unaffected*.

- | | |
|---|--|
| 1. Air Quality | 7. Areas of Critical Environmental Concern |
| 2. Prime or Unique Farmlands | 8. Native American Religious Concerns |
| 3. Flood Plains | 9. Wild & Scenic Rivers |
| 4. Wilderness Values | 10. Environmental Justice * |
| 5. Cultural Resources * | 11. Port-Orford-Cedar Management * |
| 6. Hazardous Materials & Solid Wastes * | |

Examination shows the following critical elements of the human environment *could be affected*.

- | | |
|--|-----------------------------|
| 12. Surface/Ground Water Quality | 14. Wetlands/Riparian Zones |
| 13. Noxious Weed/Invasive Non-native Species * | 15. ACS Objectives * |
| 16. Threatened, Endangered, Survey & Manage, & other Special Status Species (Plants & Animals) | |

* Requires specialist review.

Cultural Resources:

Review of project documentation and a record check shows there are no known cultural resources located in or near the proposed action areas. Project design features include standard stop work stipulations, should any discoveries occur. No further analysis is required.

Hazardous Materials & Solid Wastes:

Project location review revealed no hazardous materials or solid wastes on or near the existing road or proposed road reroute. Project design features include standard stipulations. No further analysis is required.

Environmental Justice:

The proposed project areas are not known to be used by, or disproportionately used by, Native Americans, minorities or low-income populations for specific cultural activities, or at greater rates than the general population. This includes the relative geographic location and cultural, religious, employment, subsistence, or recreational activities that may bring them to these areas. BLM concludes that no disproportionately high adverse human health or environmental effects would occur to Native Americans, minorities, or low-income populations from these actions. No further analysis is required.

Port-Orford-Cedar Management:

The project area is in the natural range of Port-Orford-Cedar, and the population within the area appears to be small and widely scattered. Port-Orford-cedar is present at the road failure and junction realignment sites, and within the 29-12-7.7 road prism. Port-Orford-Cedar was not noted within the proposed reroute or within 30' of other roads that would be used during this project. No *Phytophthora lateralis* infection was noted in the area.

Water Quality, Surface/Ground:

Geology:

The project area is located near the boundary of the Tyee Basin and Klamath Mountains physiographic provinces (Orr et al, 1992). The failure appears to be at the contact of the overlying Roseburg Formation-Sedimentary sandstones and the underlying Otter Point Formation-shear mélange siltstone

Field observations within the failure traced the scarp face along the majority of the bowl, ranging from 100 feet downslope of the road to an undetermined distance upslope of the road. Recent slide movement was observed at the toe of the fill area. This is the probable contact point of the Roseburg Formation-Sedimentary and the probable Otter Point Formation. The scarp height was approximately eight to ten feet. The soil was saturated, forming surficial slurry, approximately one to three feet deep, or more. Raveling was evident from the scarp face. Tension cracking was evident in the block bound by the scarp. While not necessarily a function of the slide, a difference in vegetation was observed between the sliding areas, bound by the scarp, and the “stable” areas outside the scarp. It appeared the scarps have offset juvenile tree sets.

In addition to fresh scarps and saturated soils, fresh erosional down cutting was evident along the drainage containing a free flowing stream. Another drainage, located to the west of the flowing drainage, contained still water pools. There was evidence of flowing water. It is possible that surficial changes in the slope, caused by slide slip and/or rotation, could have altered the drainage patterns, abandoning one system and creating or increasing the flow to other system. Tilted trees, another indicator of slope failure, were observed in a gully/drainage northeast from the road. The bowl, in general, appears to neck down to a debris chute to the north-northwest.

It appears that the entire bowl area is in the process of failing. The interpretation is that the thin sandstone material of the Roseburg Formation-Sedimentary was sliding on top of and/or along with the underlying potential Otter Point Formation. If this was indeed the case, the failures will continue up slope until the stability of the Roseburg Formation-Sedimentary exceeds the instability of the underlying formation.

The immediate bowl area appeared to be very active, with a complete or partial failure of the bowl material within the near future. Such a failure could result, in a worst-case scenario, in a mud torrent, containing little debris at the head. It should be noted that the existing road does not appear to be the source of the failure. However, the deposition of material in the fill area may have locally overloaded the underlying formation, exasperating existing failure potential. However, scarps are located within the entire bowl, not just below and within the fill. Therefore, the fill would account for one small portion of an otherwise natural process.

Base on field observations the proposed relocated would transverse through the Roseburg Formation-Sedimentary (Baldwin, 1973) sandstone, which offers more stability than the Otter Point Formation. The reroute road should be removed from the exposed potential Otter Point Formation within the slide area.

Additional geologic information can be found in the specialist’s report in the analysis file

Soils: The failure and the reroute soils are both derived from sandstone. It is most likely that the soil within the failure is the Digger gravelly loam. The soil map (Haagen, 1989) for the area of the failure is the Preacher-Blachly-Digger Association, 30% to 60% slopes. The route appears to go through the Umpcoos, very gravelly sandy loam, and Rock Outcrop. The soil map (Haagen, 1989) of the reroute is Digger-Umpcoos-Rock Outcrop. Additional information on soils can be found in the specialist’s report in the analysis file, and the Soil Survey of Coos County, Oregon (Haagen, 1989).

Hydrology:

The hydrologic characteristics of the John’s Creek and Endicott Creek sub-basins are controlled by precipitation, which falls almost entirely in the form of rain; typical of the Coast Range (USDI-BLM 2001). John’s Creek is a 4th order tributary to the lower North Fork Coquille River. It drains approximately 2.77 square miles. Two small tributaries to John’s Creek originate in the topographic bowl containing the road failure within the project area. Accelerated surface erosion is evident along the majority of the scarp.

Active erosion is occurring in the ditch line and ruts within the tread surface. Sediment generated is being delivered downstream through a channel connecting the ditch line to the stream network. The convergent bowl containing the slump appears to be the natural groundwater emergence site, where channelized surface flow initiates.

Endicott Creek is a 5th order tributary to the lower Middle Fork Coquille River. Endicott Creek drains approximately 2.83 square miles. The proposed road reroute is located along the opposite face of the hillside encompassing the slump. Construction of a full bench road at this site would produce cut slopes with varying heights. No stream channels are present within 1,000 feet of the reroute location.

Realignment of the road junctions are at mid-slope, on low to moderate gradient topography, and outside of riparian reserves. The road prism would mostly be constructed on fill and little, if any, cut slopes would be required.

Noxious Weeds/Invasive Non-native Species:

Scotch broom and Himalayan blackberries are present in the project areas.

Wildlife (including; Threatened, Endangered, Survey & Manage, & other Special Status Species):

The sites are within a 0.25 mile of unsurveyed suitable marbled murrelet nesting habitat and within 0.75 mile of a marbled murrelet occupied site. There are no spotted owl sites within the area. The reroute is entirely in a seven-year-old (1995 planting) conifer plantation. The intersection realignments would require removal of some hardwoods and conifers. These trees range from 5-20 years old and are generally less than 10" in diameter at breast height.

Fish (including; Threatened, Endangered, Survey & Manage, & other Special Status Species):

The road failure and junction reroutes are in John's Creek drainage, which is located in the North Fork Coquille River 5th field watershed. John's Creek drainage is roughly 1,787 acres in size, and supports populations of coho salmon, winter steelhead trout, and coastal cutthroat trout (migratory and resident populations). It is also likely that it supports populations of Pacific lamprey, brook lamprey, and sculpin, but these species have not been documented. The range of anadromous fish in John's Creek was believed to be limited to the lower reaches of the creek below the falls, approximately ¾ mile upstream of the confluence with the North Fork Coquille. However, steelhead trout were observed above the falls in recent years, which indicates that their actual range is limited to the impassable culverts on BLM lands (USDI-BLM, North Fork Coquille Watershed Analysis, 2001).

The road reroute is in the Endicott Creek drainage, which is located in the Middle Fork Coquille 5th field watershed. Endicott Creek is approximately 1840 acres in size. There is a short segment (~0.5 mile) of fish habitat at the lower end of the stream, which supports spawning and rearing for coho salmon, steelhead trout, cutthroat trout, and potentially fall Chinook salmon. A large waterfall located roughly 0.5 mile upstream from the mouth prevents further access by all fish. Electro-fishing above these falls in 1995 confirmed that there are no fish in Endicott Creek above this point.

Steelhead and cutthroat trout are considered "candidates" for Federal listing under the Endangered Species Act (ESA); stock status reviews are ongoing to determine if future listings may be warranted

The entire analysis area is within the Oregon Coast Evolutionarily Significant Unit (ESU), for coho salmon, steelhead, and cutthroat trout. The Oregon Coast coho salmon is a Federally listed Threatened Species. Impacts to this species and Designated Critical Habitat have been addressed in consultation with the

National Marine Fisheries Service. All mandatory terms and conditions from the NMFS March 18, 1997 Biological Opinion have been or would be incorporated, in accordance with the Endangered Species Act.

Botany (including; Threatened, Endangered, Survey & Manage, & other Special Status Species):

The proposed obliteration site and realignment sites have typical disturbed roadside flora such as blue blossom, (*Ceanothus thrysiflorus*), and chaparral broom, (*Baccharis pilularis*), and thimbleberry, (*Rubus parviflorus*), along with various forbs and grasses that are prevalent in recently disturbed areas.

On May 30, 2002, the proposed obliteration and realignment sites were surveyed for all potential special status and S&M botanical species. On June 3, 2002, the proposed road construction was surveyed for all potential special status and S&M botanical species. No S&M species (i.e., vascular plants, lichens, liverworts, and mosses) were found. No special status vascular plants, specifically, California globe mallow and clustered lady's slipper, were found. A species list is in the analysis file, including some of the dominant shrub and forbs of the John's Creek and Moore Mill project area.

Section IV – Environmental Consequences

This section discusses the direct, indirect, and cumulative environmental consequences of each alternative.

Alternative No. 1 - No Action:

Port-Orford-Cedar Management:

Direct and Indirect Effects:

The Port-Orford-Cedar near the road failure site could be more susceptible to the introduction and spread of the root disease. Current conditions have resulted in water pooling in and running across the road. This wet condition increases the chance of vehicles depositing the spore on site or transporting it to other locations.

Cumulative Effects:

No cumulative impacts, beyond current conditions, are expected. The small population and scattered distribution naturally protects the trees that are not along spread corridors (i.e. roads or streams), from being infected with the root rot disease.

Water Quality, Surface/Ground:

Geology:

Direct and Indirect Effects:

Continued use of the failing site will not stop the geological failure. However, continued use could result in further damage to the slide area. The slump caused the roadbed to fail and disrupted the water drainage patterns. The failed road is bumpy, wet, and rutted. Continued vehicle use is increasing the severity of these conditions, preventing vegetation re-growth and/or removing more vegetation from vehicle passing through the slide area. Repeat placement of fill material, during any maintenance to keep this route open, could overload the slide. Environmental quality and public safety would continue to be compromised because of the road condition and increased potential for site failure from maintenance and use.

Cumulative Effects:

This alternative would have minimal cumulative impacts on existing geologic conditions. The current failure would continue regardless of the status of the road. However, continued use of the road through the failure may increase the rate of failure. This could allow for a more intense delivery of material down-slope, over a shorter time.

Soils:

Direct and Indirect Effects:

Use of the slide area by motor vehicles may impact existing soil conditions and erosion controlling vegetation, allowing for mobilization of sediments to the waterways. This does not appear to have initiated the current failure, but may accelerate future conditions.

Cumulative Effects:

The failure would continue with or without the road closure. There appears to be no Cumulative Impacts as the result of no action.

Hydrology:

Direct and Indirect Effects:

The routing of water, both surface and subsurface would remain the same throughout the proposed project area. Road related surface erosion along the scarp of the slump would continue to deliver sediment to downstream water bodies. Some of the road related surface erosion problems might be temporarily corrected when maintained by the district road maintenance crew. Nonetheless, road related surface erosion would likely continue in the long-term based upon the instability of the road prism.

Cumulative Effects:

It is assumed that sediment delivery coming from this site has the potential to compound any negative impacts that are occurring downstream.

Noxious Weeds/Invasive Non-native Species:

Direct and Indirect Effects:

The road failure has created disturbed soils preferred by noxious weeds. The expected continual maintenance, to keep the road open, would keep these soils disturbed. No attempts to revegetate exposed soils would occur under this alternative. Additionally, the wet condition of the road would act as a washer for vehicles and road maintenance machinery passing through. This “washing” results in any noxious seeds being carried by these vehicles to be deposited on site. The potential for this site to become dominated by noxious weeds/invasive non-native species is increased under this alternative.

Cumulative Effects:

In the long term, this site would not vary greatly from the surrounding landscape.

Wildlife (including Threatened, Endangered, Survey & Manage, & Other Special Status Species):

Direct, Indirect, and Cumulative Effects:

There would be no new effects on any wildlife species.

Fish (including Threatened, Endangered, Survey & Manage, & Other Special Status Species):

Direct and Indirect Effects:

No new roads or road realignments would be constructed. There would be no direct effects related to this alternative. Indirect effects, of no action, result from a lack of access to the roads beyond the slide area. Without access to these roads, it is likely that culverts would plug and fail over time, thereby worsening the condition of the road network in this area.

Cumulative Effects:

The large landslide in the project area is likely to slowly continue to erode, contributing coarse and fine sediments to John’s Creek, and the North Fork Coquille River downstream over time. There is no restorative treatment, deemed effective, on such a large-scale natural landslide. There is potential for additional sediment contribution to the John’s Creek drainage and downstream, originating from future road failures. As discussed in the indirect effects section above, without access to the existing road system located beyond the landslide area, roughly 3.2 miles of road, 9 stream crossings, and numerous ditch relief culverts would not be maintained. Without maintenance, it is likely that culverts would plug and fail over time – potentially resulting in road fill failures, stream diversions, and debris flow events. All of these events would contribute additional sediments to the aquatic ecosystem, thereby having a negative effect on fish populations and fish habitat in the John’s Creek system.

Botany (including Threatened, Endangered, Survey & Manage, & Other Special Status Species):

Direct and Indirect Effects:

There would be no negative impacts to special status or S&M botanical species from leaving the road failure in its present condition and conducting basic road maintenance. The failed portion of the road would continue to provide habitat for plants. Continual slumping of the road would sporadically create disturbed soil, which would provide habitat for opportunistic or disturbance species, especially non-native species.

Cumulative Effects:

No negative cumulative impacts to special status or S&M species would occur in the long-term. Disturbed ground which provides habitat for exotic plants would remain on the unused road and where sporadic slumping occurs. Establishment of exotic plants would continue to occur at a greater rate than for native plants.

Alternative No. 2 - Proposed Action:

Port-Orford-Cedar Management:

Direct and Indirect Effects:

The Port-Orford-cedar near the road failure site would be protected from the introduction and spread of the root disease because of the road closure. Port-Orford-cedar is not present on the reroute site, only at the realignment of the road junctions. These trees would be cut a part of the realignment process and therefore not present a problem.

Cumulative Effects:

No cumulative impacts, beyond current conditions, are expected. The small population and scattered distribution naturally protects the trees that are not along spread corridors (i.e. roads or streams), from being infected with the root rot disease.

Water Quality, Surface/Ground:

Geology:

Direct and Indirect Effects:

This alternative discontinues use of the existing route, allowing for revegetation of the roadbed. The current drains could be removed and the water deliveries routed into beneficial routes. While this may not stop the failure, it may remove some of the aggravations. The reroute would create a high mid-slope road and the length would be similar to that being obliterated. However, given the soil depth to bedrock and the slope, road-caused debris flows are possible. Proper water management should mitigate for this potential. Waste material from bench construction would be reused in engineered road fill construction. There are possibilities of intersections with stratigraphic dip planes and fault/shear zones. Intersection of topographic concurrent dip planes could result in block slides. However, the road itself would create a catch point for any failures, restricting material movement down slope. Because the road would be located on the high mid-slope, the amount of upslope failure material is minimized.

Cumulative Effects:

This alternative would have minimal cumulative impacts. There is a potential of increased watershed debris flows by the construction of the road. However, the length of road, within the scale of the watershed, is

small, providing minimal exposure to flow initiation. Proper water management should mitigate this potential, further reducing possible cumulative impacts.

Soils:

Direct and Indirect Effects:

This alternative may allow for revegetation of the failure surface, allowing for the stabilization of surface soils. However, this alternative would not stabilize the failure. The construction of the reroute would remove a portion of the Umpcoos soils were the bench construction would occur. However, the amount of soil productivity lost would be minimal compared to the entire watershed.

Cumulative Effects:

In general, the amount of road constructed would be offset by the amount of road obliterated. While the areas are differing soil areas, the amount of soil lost to construction would be regained by the amount of area allowed for soil to be created in the obliterated road segment. Therefore, there would be no cumulative impacts from this alternative.

Hydrology:

Direct and Indirect Effects:

No measurable changes to water quality or quantity are expected. Excess water and sediment generated along the reroute road prism would be routed onto the forest floor with cross drains, eliminating potential delivery to streams. Road related surface erosion along the scarp of the slump would be eliminated, and at the realignment of the road junctions the interception of shallow subsurface flow would be minimal.

A debris flow or shallow rapid landslide originating from the potentially unstable portion of the proposed road has a low likelihood of reaching a stream channel based upon the down slope topography, which forms a rather broad and gently sloping bench. Landslide associated debris would most likely be deposited along the bench, at least 100-300 feet upstream of any known stream channel. There may be the potential for a short-duration pulse of suspended sediment under conditions conducive to overland flow (which are thought to be unlikely at this particular site). The effects of this potential sediment delivery are thought to be negligible since it would be associated with a high magnitude, low recurrence interval, storm event where background turbidity levels would already be elevated.

Cumulative Effects:

No cumulative effects are expected since there would be no hydrologic connectivity between the newly constructed roads and the stream network. Furthermore, there would be no net increase in the quantity of roads present within the project area. The quantity of roads within the Endicott Creek sub basin would increase slightly (from 1.44% of the watershed area to 1.45%) but would remain well below the threshold of hydrologic significance. Unless land use patterns change dramatically within the watershed, these actions would not contribute to a cumulative effect.

Noxious Weeds/Invasive Non-native Species:

Direct and Indirect Effects:

The road failure site would be obliterated. No road maintenance or vehicle access would occur. All disturbed ground would be seeded (see project design features for details). Noxious weeds would not dominate the site. The road reroute and junction realignments would be treated the same as the road failure site discussed above. Additionally, as part of the design features, machinery would be washed prior to entering public lands, thereby limiting the chances for the introduction and spread of noxious weeds.

Cumulative Effects:

The road failure site is geologically unstable and likely to continue moving. The rate/amount of movement would determine how much exposed soil is created. Noxious weeds favor this environment and would persist in the failure area. A massive failure would require mitigation to prevent the site from being overrun by noxious weeds. The reroute and junction realignments would not be more susceptible to noxious weed infestation or persistence than the surrounding landscape.

Wildlife (including Threatened, Endangered, Survey & Manage, & Other Special Status Species):

Direct and Indirect Effects:

Construction noise from heavy equipment and the use of explosives during the nesting season may disturb nesting marbled murrelets in both the unsurveyed suitable habitat and the occupied site. Project Design Criteria covered under programmatic consultation Biological Opinion 1-7-98-F-079 (C96-01b) would be included in the contract (see project design features Sec. II). The conifer trees in the plantation where the proposed new construction is to take place are not critical habitat for wildlife species. Additionally, the trees removed for the realignment of the intersections are not suitable for nesting marbled murrelets and not critical for other wildlife species. All the trees to be removed and surrounding trees within 15 meters of the realignments were surveyed for red tree voles, a survey and manage species. No evidence of red tree voles was found. There are no other special status species affected by this action. Endangered Species Act compliance: Spotted owls - no effect. Marbled murrelets - may effect, not likely to adversely effect if seasonal and daily timing restrictions are followed.

Cumulative Effects:

There would be approximately 1800 feet of new road construction in the Middle Fork Coquille watershed and approximately 300 feet of realignment and 1000 feet of road obliterated in the North Fork Coquille watershed. This reroute would be both a net increase in road density and force an increase in road travel in this area. Both these effects are negative for all wildlife.

Fish (including Threatened, Endangered, Survey & Manage, & Other Special Status Species):

Direct Effects & Indirect Effects: It is likely that small amounts of surface erosion would occur during the first fall rains contacting the newly disturbed surfaces created during project activities. Mobilized sediment, in runoff waters, would be routed to the nearest ditch relief culvert, and directed onto the adjacent forest floor – where it would filter through the existing duff layers and vegetation present in the area. In Endicott Creek, the nearest defined stream channel is located roughly 750 feet downhill of the proposed construction activity. In John's Creek, the nearest defined stream channel is located approximately 300 feet from the areas proposed for junction realignments. In addition, these areas are located on relatively flat, bench locations - further reducing the likelihood of sediment mobilization and delivery to the aquatic system. It is highly unlikely that there would be any indirect effects on fish or aquatic habitat in the Endicott Creek or John's Creek drainages because of the construction activities. If sediment from this activity entered the aquatic system in Endicott Creek, the amount would likely be insignificant, and not detectable above background levels. In addition, the nearest documented fish habitat is located roughly 2 miles downstream. In John's Creek, the nearest documented fish habitat is located approximately 0.5 mile downstream from the proposed activity.

Construction of the proposed road near the ridgeline in Endicott Creek may result in a slightly increased risk of initiating a small slide or debris flow. While this risk would be greatly reduced by the use of full-bench construction techniques and adequate drainage structures, the potential for concentrated runoff waters during storm events would still exist. These concentrated waters could result in saturated hill-slopes in the

vicinity of the road, and trigger small landslides. If a small landslide or debris flow were to occur in this area, it is extremely unlikely that the slide materials would enter the aquatic system of Endicott Creek. This is due to the presence of a large, flat bench approximately 150 feet below the proposed road location that would prevent landslide materials from proceeding any further down the slope.

Cumulative Effects: The large slow moving landslide in the project area is likely to continue to erode, contributing coarse and fine sediments to John's Creek, and the North Fork Coquille River downstream over time. No restorative treatment is deemed effective on such a large scale, natural landslide. A cumulative effect of the proposed action would be a slight increase in the road density figure in the Endicott Creek drainage. This small increase would not be expected to result in negative effects to fish or aquatic habitat, as there are no stream crossings or riparian reserves near this road segment. In John's Creek, a cumulative effect of providing access to the road system beyond the slide area would be continued maintenance, and prevention of the majority of road-related impacts to the aquatic system. When compared to the no-action alternative, this action would likely prevent future sources of sediment input into the aquatic system of John's Creek over time. Therefore, the contribution of sediment to the aquatic system from this action is unlikely. If sediment did make it to a live stream channel, the amount would be small, and the effects would be insignificant. The activities proposed in this alternative are not likely to contribute negatively to fish populations, aquatic habitat, or the cumulative sediment regime in each of the respective drainages.

Threatened and Endangered Species, Essential Fish Habitat, and Consultation:

The entire analysis area is within the Oregon Coast Coho Salmon Evolutionarily Significant Unit (ESU). The Oregon Coast coho salmon is a Federally listed Threatened Species. Impacts to this species and Essential Fish Habitat have been addressed in consultation with the National Marine Fisheries Service. All mandatory terms and conditions from the NMFS March 18, 1997 Biological Opinion have been or would be incorporated, in accordance with the Endangered Species Act.

The primary risk of an impact occurring from the actions associated with this project would come from sediment delivery originating from newly disturbed soils (cut banks, new gravel surfacing, fill slopes near junction reroutes, etc.). The segments of new road construction proposed have no stream crossings and are well away from coho salmon habitat (approximately 2 miles). The junction re-route areas are located on a flat bench with no stream crossings, and are roughly 0.85 miles above the nearest coho salmon habitat. Therefore, there is no direct mechanism for an aquatic impact to occur associated with the proposed activities. These actions would be considered "Not Likely to Adversely Affect", and are covered programmatically in the NMFS Letter of Concurrence (LOC) dated July 2, 2001. In order to be covered under this LOC, the actions must utilize the Project Design Features listed in this environmental assessment (also, see specialist report).

The analysis area contains "Essential Fish Habitat", as defined in the Magnuson-Stevens Act. For purposes of consistency and brevity, the description of actions and effects pertaining to ESA consultation is considered sufficient for EFH consultation.

Under section 305 of the Magnuson-Stevens Act, Federal agencies that authorize, fund or undertake any action that may adversely affect any EFH are required to consult with the NMFS in order to receive recommendations on measures necessary to conserve and enhance EFH. Based on our review of the information provided, the proposed action would not adversely affect salmon EFH for the reasons described above in the ESA discussion.

The NMFS is required to provide EFH conservation recommendations to the BLM for actions that adversely affect EFH. Since the impacts of the proposed action are likely to be insignificant or negligible, no EFH

conservation recommendations are proposed for this project. The BLM must reinitiate consultation with NMFS if the action is substantially revised in a manner that may adversely affect EFH or if new information becomes available, that affects the basis for NMFS' EFH conservation recommendations (50 CFR Section 600.920 [k]).

Botany (including Threatened, Endangered, Survey & Manage, & Other Special Status Species):

Direct and Indirect Effects:

There would be no direct or indirect effects to special status or S&M species from the obliteration of the road section or junction realignment of the road sections. Botanical diversity and abundance would decrease where the road construction and the road improvement would occur. These actions would disturb the soil and create potential habitat for exotic or non-native plants. Obliterating the road would create disturbance in the area of an existing road prism. Restoration with native plants would enhance botanical diversity and abundance and limit the colonization by non-native species. There would be no direct or indirect effects to special status or S&M species from the construction of the road reroute. Botanical diversity and abundance would decrease in the area of the proposed reroute site.

Cumulative Effects:

No cumulative effects to special status or S&M species would occur. Disturbed ground, which provides habitat for exotic plants, would remain on untreated portions of the road and where sporadic slumping occurs. Establishment of exotic plants could occur at a greater rate than for native plants. No cumulative effects to special status or S&M species would occur at the reroute site. The stand is immature and doesn't provide suitable habitat for special status or S&M plant species. Habitat for plants would be removed from the area of the new road construction, which runs approximately 1200 feet long and would average 50 feet in width. Similarities in understory vegetation between young stands and old-growth stands suggest that native vascular plants in the Coast Range are resilient to environmental change (Bailey et al. 1998). Thus, no cumulative effects are expected.

ACS Objectives:

The four components of the Aquatic Conservation Strategy are 1) Riparian Reserves, 2) Key Watersheds, 3) Watershed Analysis, and 4) Watershed Restoration.

1. None of the proposed construction or road realignment is located within a Riparian Reserve. There are no defined stream channels near this activity.
2. John's Creek and Endicott Creek are not within Key Watersheds. The nearest key watersheds are located in different sub-watersheds, well upstream of the proposed activity.
3. The Transportation Management Objectives (TMO) process, completed in the North Fork Coquille Watershed Analysis, recommended that the majority of the road system beyond the landslide area be kept open. Two small spurs along these roads are proposed for future decommissioning.
4. This action is primarily a road repair project, not a restoration project. Completion of the action, however, would allow continued road maintenance activities to occur on the road systems in John's Creek. This maintenance would likely minimize future road-related impacts to the aquatic ecosystem. Additionally, it provides access to the two spur roads proposed for decommissioning.

References

40 CFR regulation 1500.1(b), 1500.2(b) and other sections.

50 CFR Section 600.920 [k], for NMFS' EFH conservation recommendations.

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